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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/685,318 | 10/14/2003 | Xinggao Fang | 5682A | 5027 |

7590 10/14/2005

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| EXAMINER | |
|---|---|
| MATZEK, MATTHEW D | |
| **ART UNIT** | **PAPER NUMBER** |
| 1771 | |

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/685,318 | FANG ET AL. | |
| | Examiner | Art Unit | |
| | Matthew D. Matzek | 1771 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *08 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-12,14-16 and 18-34* is/are pending in the application.

4a) Of the above claim(s) *12,14-16,18-23,25-32 and 35* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11, 24 and 33-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/20/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Election/Restrictions*

1. Claims 12, 14-16, 18-23, 25-32 and 35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/6/2005.

2. Applicant has canceled claims 13 and 17.

3. The objection to claims 5, 6, 13 and 17 have been withdrawn due to amendment or cancellation of said claims.

4. The new claims provided in the Amendment dated 9/6/2005 have been considered and entered into the Record. The amended claims contain no new matter. The Examiner submits the Linert et al. reference (US 2003/139521 A1) to address the new limitations of the present amendment. The rejections over prior art, Bullock et al., have been withdrawn as the reference fails to teach the use of blocked isocyanates and the specific fluoropolymers to be used in the treated textile.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 5-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Bullock et al. (US Patent 6,251,210) as stated in the previous Office Action.

a. Bullock et al. disclose a treated textile fabric comprising two chemical treatments with the primary comprising at least about 5 weight percent of a fluorochemical and the secondary comprising the same composition as the primary except the fluorochemical comprises at least about 4 weight percent of the composition (Abstract). The Examiner takes the position that less than about 4 weight percent (Applicant) and at least about 4 weight percent (Bullock et al.) both extend beyond the value of 4 percent: 4.1 % for Applicant and 3.9% for Bullock et al. Therefore, the applied art anticipates the instantly claimed fluorochemical level. The primary treatment may also contain one or more antimicrobial agents, fluoropolymers, and cross-linked resins (col. 4, lines 42-44, col. 12, lines 7-31). The fluorochemicals provide water repellance and stain resistance (col. 12, lines 9-14). The applied patent teaches that the preferred latex component of the primary fluorochemical treatment may comprise acrylate copolymers and terpolymers of methylacrylate (col. 11, lines 17-49). The applied article teaches the use of unblocked poly-isocyanate (col. 1, lines 44-66).

b. Claims 5 and 6 are rejected as the applied patent discloses that the anti-microbial agent may be "any substance or combination of substances that kills or prevents the growth of a microorganism and includes antibiotics, antifungal, antiviral, and antialgal agents, which includes triclosan and ZINC OMADINE™ (col. 11, lines 50-59). Zinc pyrithione is the generic name for ZINC OMADINE™.

c. Preferred crosslinking resins and the associated crosslinkers of the applied patent are disclosed (col. 12, lines 25-41).

d. Claim 11 is rejected as the secondary coating is to be applied to only one side of the fabric (Abstract).

e. The applied patent is silent as the hydrophobicity of the disclosed crosslinking components, however as the invention is directed for use as a stain and water repellant textile fabric it is reasonable to presume that the crosslinking agents taught by Bullock et al. are hydrophobic.

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 24 and 33 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bullock et al. as stated in the previous Office Action.

a. Although Bullock et al. do not explicitly teach the claimed feature of a stain release value to corn oil and tanning oil or burned motor of at least about 3 and exhibits inhibition of microbial growth upon the textile, it is reasonable to presume that said properties are inherent to Bullock et al. Support for said presumption is found in the use of like materials (i.e. a textile with a common fluorochemical coating). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a stain release value to corn oil and tanning oil or burned motor of at least about 3 and exhibits inhibition of microbial growth upon the textile

would obviously have been present one the Bullock et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35 USC 102.

***Claim Rejections - 35 USC § 103***

7. Claim 10 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. as applied above to claims 9 and 33 and further in view of Fitzgerald et al. (US 6,451,717 B1). The invention of Bullock et al. is silent as to the specific fluoropolymers to be used in the treated textile.

a. Fitzgerald et al. disclose an aqueous emulsion for imparting oil and water repellency to textiles comprising an aromatic blocked isocyanate and fluoropolymer (Abstract). The applied patent teaches the use of fluoropolymers that include perfluoroalkyl groups connected to polyurethane or (meth)acrylate groups (col. 1, lines 60-67). "(Meth)acrylate is to include methacrylate, acrylate, or a combination of these groups (col. 1, line 67 – col. 2, line 2).

b. Since both Bullock et al. and Fitzgerald et al. are both from the same field of endeavor (i.e. oil and water repellant coated fabrics), the purpose disclosed by Fitzgerald et al. would have been recognized in the pertinent art of Bullock et al.

c. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the article of Bullock et al. with the fluoropolymers of Fitzgerald et al. The skilled artisan would have been motivated by the desire to make a treated textile product with oil and water repellency properties.

8. Claims 1-4, 7-11, 24 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linert et al. (US 2003/139521 A1).

a. Linert et al. teach a fluorochemical composition to render a fabric oil and/or water repellant comprising not more than 4% fluoropolymer such as fluorinated ester, blocked isocyanates, fungicidal agents (Abstract, [0071-73]). The applied publication is silent as the hydrophobicity of the disclosed crosslinking components, however as the invention is directed for use as a stain and water repellant textile fabric it is reasonable to presume that the crosslinking agents taught by Linert et al. are hydrophobic. The applied article is silent to the incorporation of an antimicrobial agent. It would have been obvious to one of ordinary skill in the art to have used an antimicrobial agent in the incorporation of the article of Linert et al. as the article already includes a fungicide and an antimicrobial agent would provide greater resistance to unwanted contamination and growth.

b. Although Linert et al. do not explicitly teach the claimed feature of a stain release value to corn oil and tanning oil or burned motor of at least about 3 and exhibits inhibition of microbial growth upon the textile, it is reasonable to presume that said properties are inherent to Linert et al. Support for said presumption is found in the use of like materials (i.e. a textile with a common fluorochemical coating). The burden is upon Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of a stain release value to corn oil and tanning oil or burned motor of at least about 3 and exhibits inhibition of microbial growth upon the textile would obviously have been present one the Bullock et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote (CCPA 1977) as to the providing of this rejection made above under 35

USC 102. Reliance upon inherency is not improper even though rejection is based on Section 103 instead of Section 102. *In re Skoner,* et al. (CCPA) 186 USPQ 80.

***Double Patenting***

9. Claims 1-11, 24 and 33-34 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7, 24-25, 39-34; 1-70; 1-21 of copending Application Nos. 10/659,900; 10/785,218; 10/780,976. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the applications are directed to fluorochemically-treated fabrics.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Response to Arguments***

10. Applicant's arguments filed 9/8/2005 have been fully considered.

11. Applicant argues that Bullock et al. does not teach the use of blocked isocyanates. Examiner agrees and has withdrawn the associated rejection.

12. Applicant argues that Bullock et al. does not teach a fluorochemical composition of less than about 4 weight percent. The Examiner takes the position that less than about 4 weight percent (Applicant) and at least about 4 weight percent (Bullock et al.) both extend beyond the value of 4 percent: 4.1 % for Applicant and 3.9% for Bullock et al. Therefore, the applied art anticipates the instantly claimed fluorochemical level.

*Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Matzek whose telephone number is (571) 272-2423. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NORCA TORRES
PRIMARY EXAMINER

mdm